

R E M A R K S

The above identified Office Action has been reviewed, the references carefully considered, and the Examiner's comments carefully weighed. In this regard, Claim 2 has been canceled without prejudice, Claims 1, 3 and 14 have been amended, and new claims 16 through 18 have been added. In this regard, Claim 14 has been recast into independent form, and new independent Claim 16 incorporates the original recitations (Section 112 corrected) of Claims 1, 2, 3 and 11.

It is contended that by the present Amendment that all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. 112

Ground for Rejection:

According to the Office Action, Claims 1-2, 4 and 11 are rejected as being indefinite in that Claim 1 fails to have antecedent basis for the term "said magnetic target wheel".

Applicants' Response:

Applicants have deleted the word "wheel" from the above indicated term, whereupon the amended term now has proper antecedency.

Accordingly, in view of this amendment Applicants respectfully request the rejection under 35 U.S.C. 112 be withdrawn.

Rejection under 35 U.S.C. 102

Grounds for Rejection:

According to the Office Action, Claims 1, 14 and 15 are rejected as being anticipated by Shinjo et al.

Further according to the Office Action, Claims 1 through 10 are rejected as being anticipated by Yokotani et al.

In view of the present amendment, Applicants respectfully traverse the aforesaid grounds for rejection under 35 U.S.C. 102(b) for the reasons set forth in detail below. In this regard, Applicants note that Claim 14 has now been recast into independent form.

The test to be applied for purposes of determining the propriety of a rejection of the Claims under 35 U.S.C. 102 is set forth in RCA Corporation v. Digital Data Systems, Inc., 221 U.S.P.Q. 385, 388 (C.A.F.C. 1984), where the Court held:

"Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every claimed element of the claimed invention."

Applicants' amended base Claim 1 requires, inter alia:

"...a bias magnet having a bottom surface and at least one side surface oriented generally perpendicularly in relation to said bottom surface, said bias magnet providing a magnetic field;

a magnetically sensitive element facingly adjacent said at least one side surface of said bias magnet; and

a magnetic target located adjacent said bottom surface of said bias magnet and adjacent said magnetically sensitive element disposed in movable relation with respect thereto, said magnetic target comprising a plurality of predetermined magnetic irregularities which magnetically affect said magnetic field of the bias magnet sensed by the magnetically sensitive element as said magnetic target moves in relation to said bias magnet and said magnetically sensitive element;

wherein said magnetic field of said bias magnet is oriented substantially parallel to a direction of movement of said magnetic irregularities of said magnetic target;

wherein said magnetically sensitive element is sensitive to a component of said magnetic field which is parallel to the direction of movement; and

wherein said magnetically sensitive element is aligned with said bias magnet parallel to the direction of movement of said magnetic irregularities."

Applicants' amended base Claim 14 requires, inter alia:

"... a bias magnet having a bottom surface and at least one side surface oriented generally perpendicularly in relation to said bottom surface, said bias magnet providing a magnetic field;

a magnetically sensitive element facingly adjacent said at least one side surface of said bias magnet; and

a magnetic target located adjacent said bottom surface of said bias magnet and adjacent said magnetically sensitive element disposed in movable relation with respect thereto, said magnetic target comprising a plurality of predetermined magnetic irregularities which magnetically affect said magnetic field of the bias magnet sensed by the magnetically sensitive element as said magnetic target moves in relation to said bias magnet and said magnetically sensitive element, wherein a space formed between said bottom surface of said bias magnet and said magnetic target is free of any magnetically sensitive element;

wherein said magnetic field of said bias magnet is oriented substantially perpendicular to a direction of movement of said magnetic irregularities of said magnetic target, and wherein said magnetically sensitive element is sensitive to a component of said magnetic field which is perpendicular to the direction of movement; and

wherein said magnetically sensitive element is aligned with said bias magnet parallel to the direction of movement of said magnetic irregularities."

Applicants' Response:

As can be understood best from the below reproduction of Applicants' Figure 2,

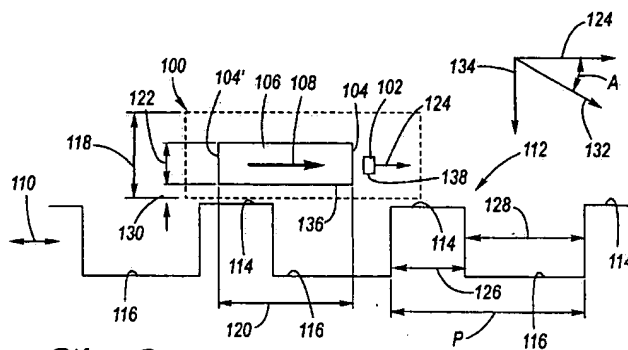


Fig. 2

base Claims 1 and 14 now clearly recite that the magnetically sensitive element (102) must be aligned with the bias magnet (106) parallel to the direction of movement (110) of the magnetic

irregularities (116, 114), and base Claim 1 further requires the magnetic field (108) be oriented in a direction parallel to the direction of movement (110). As can be additionally understood from the below reproduction of Applicants' Figure 7, base Claim 14 further recites that the

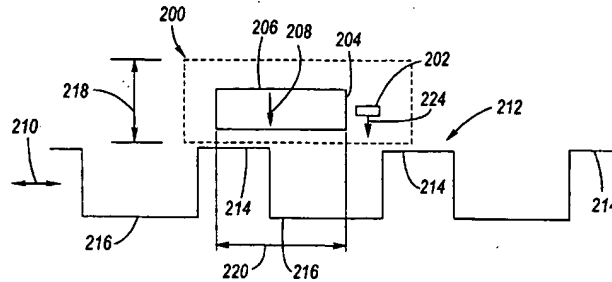


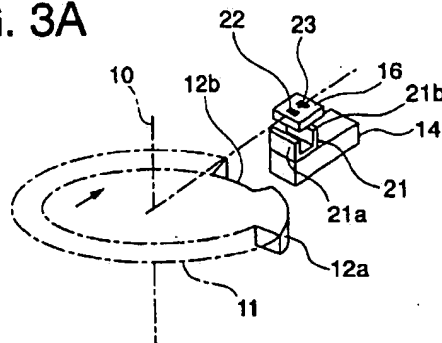
Fig. 7

magnetic field (208) must be oriented perpendicular to the direction (210) of movement of the magnetic irregularities (216, 214), and that the space between bottom surface of the bias magnet (204) and the magnetic target (212) must be free of any magnetically sensitive element (202).

Re: Yokotani et al.:

In contradistinction to the recitations of Applicants' base Claims 1 and 14, as seen from the below reproduced Figure 3A of Yokotani et al, the magnetically sensitive element (22, 23)

FIG. 3A



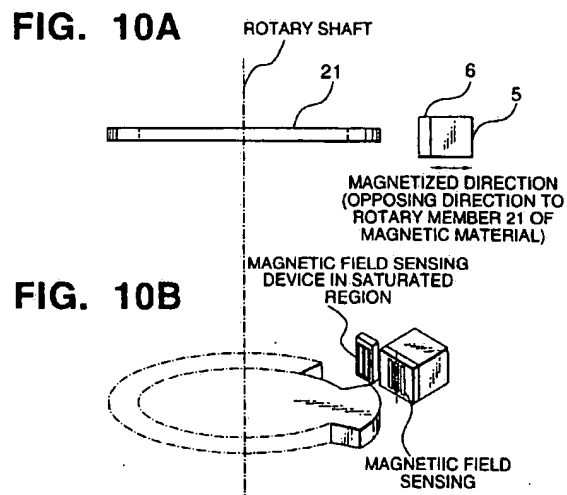
are aligned with the bias magnet (14) perpendicular to the direction of rotation, as defined by

rotation axis (10), of the magnetic irregularities (12a, 12b).

Accordingly, since Yokotani et al. discloses the magnetically sensitive elements are aligned with the bias magnet *perpendicular* to the direction of movement of the magnetic irregularities, and since Applicants' Claims 1 and 14 require the magnetically sensitive element be aligned with the bias magnet *parallel* to the direction of movement of the magnetic irregularities, Yokotani et al. does not disclose each element recited in base Claims 1 and 14, and therefore cannot anticipate these claims. Further in view that dependent claims merely further define their respective base claims, Applicants respectfully submit the dependent claims of base Claims 1 and 14 are therefore also not anticipated.

Re: Shinjo et al:

As seen from the below reproduced Figures 10A and 10B of Shinjo et al, 1) Shinjo et al disclose that the magnetization direction is perpendicular to the direction of rotation of the



magnetic irregularities, which is in clear contradistinction to the recitation of base Claim 1 which requires the magnetic field be parallel to the direction of movement of the magnetic irregularities, and 2) Shinjo et al disclose a magnetically sensitive element (6) between the

bottom surface of the magnet (5) and the magnetic target (21), which is in clear contradistinction to the recitation of base Claim 14 which requires there be an absence of any magnetically sensitive element between the bottom surface of the bias magnet and the magnetic target.

Accordingly, in view that Shinjo et al fails to disclose each element of base Claims 1 and 14, Shinjo et al cannot anticipate these claims. Further in view that dependent claims merely further define their respective base claims, Applicants respectfully submit the dependent claims of base Claims 1 and 14 are therefore also not anticipated.

In view of the present amendment and the foregoing remarks, Applicants respectfully request the Examiner to withdraw the rejection under 35 U.S.C. 102 as regards amended base Claims 1 and 14, and, under the principle that dependent claims merely further define their respective base claims, that the rejection be withdrawn as regards dependent Claims 3-13 and 15.

Indicated Allowability

According to the Office Action, Claim 11 is indicated as being allowable provided it is rewritten into independent form, including all intervening claims and correcting any Section 112 ground for rejection. New base Claim 16 recites all the recitations of original Claims 1, 2, 3 and 11, and corrects the single above indicated Section 112 ground for rejection.

Accordingly, Applicants respectfully submit new Claim 16 and its dependent Claims 17 and 18 are allowable.

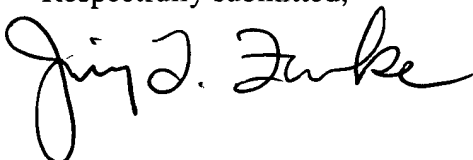
Conclusion

It is respectfully submitted that Applicants have responded in a fully satisfactory manner

to all matters at issue in this Application, and that this Application is now in condition for allowance. In this regard, Applicants have made every effort to comply with the requirements set forth in the Office Action as well as the statutory requirements. Accordingly, Applicants respectfully request that the Examiner enter this Amendment, allow the claims, and pass this Application on to issue.

You are hereby authorized to charge any fees due for filing this Amendment to Delphi Technologies, Inc. Deposit Account No. 50-0831.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jimmy J. Funke". The signature is fluid and cursive, with the first and last names being prominent.

Jimmy Funke
Reg. No. 34,166

Dated: 30-AUG-2004

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